



STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

7272 Cleanwater Lane, LU-11 • Olympia, Washington 98504 • (206) 753-2353

August 4, 1983

Mr. Mark T. Moothart  
Pacific Wood Treating Corporation  
111 West Division Street  
Ridgefield, Washington 98642

RECEIVED  
APR 8 1985

WASTE MANAGEMENT BRANCH

Subject: Comments on Pacific Wood Treating (PWT) Draft Closure/Post-Closure and Groundwater Monitoring Plans for the Ridgefield Brick and Tile (RBT) Site

Dear Mr. Moothart:

Review of the PWT draft plans, as submitted, is complete and the Washington Department of Ecology offers the following comments:

Closure Plan

1. Prior to "sprinkling the pond water on a small area west of the pond", samples must be taken to characterize this liquid. Contingencies can then be outlined to prevent dangerous wastes or other pollutants from contaminating soils or state waters.
2. In all three options, soil compaction of the liner and cap should be discussed in greater detail. What quality control measures will be instituted to ensure a uniform  $10^{-6}$  cm/sec percolation rate and what level of compaction is required for each soil type used? Is  $10^{-6}$  cm/sec adequate for a clay liner permeability and why?
3. For option III, there is concern that without encapsulating the upgradient (east) side of the refuse cell, groundwater may enter the cell from the mica sand layer. Please discuss this further and include contingencies. One option might be to locate the refuse cell above any seasonally saturated zones.
4. Option III should remove contaminated soil underlying the present "refuse area" down to the cemented gravel layer (if further sampling is not done).
5. Shouldn't the toe drain in option III be within the refuse cell, if the purpose of the drain is to collect leachate from the cell? In any case, the mobility and expected rate of migration of generated leachate should be expanded upon.
6. In the event leachate is generated, how will it be stored, sampled, tested and disposed of?



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7. The Certification of Closure is to be submitted at the completion of closure, not within three months after closure.
8. Please provide a current closure cost estimate within the body of the closure plan.
10. To minimize the amount of excess water generated over the waste cell during equipment decontamination, steam cleaning the equipment prior to exiting the contaminated area should be considered.

#### Post-Closure Plan

1. The post-closure period is not clearly defined in the draft as 30 years.
2. Please provide a post-closure cost estimate.
3. There are no certification requirements under 40 CFR, Part 265, Subpart G for post-closure as stated on page 38 of the draft document. There is, however, a requirement to record a notation on the deed to the property of restricted use, as stated in 40 CFR, Part 265.120. Please add this to the post-closure document.
4. Two additional items should be included in the post-closure inspection checklist. These are:
  - a. Condition of toe drain; and
  - b. Condition of lysimeters/wells.

#### Groundwater Monitoring Plan

1. The draft document has not addressed the implementation of a groundwater monitoring plan designed to show "the facility's impact on the quality of groundwater in the uppermost aquifer", as requested in item number 2.a. of Docket number DE 83-284. The "seasonally saturated zone" addressed in the document may not qualify as an aquifer; however, monitoring of this zone may prove to be an excellent "early warning system". In addition, the lower, year-round water bearing aquifer must be monitored with one upgradient and three downgradient wells. Existing domestic wells may, in part, be utilized for sampling purposes. A quality monitoring well, however, should be installed, upgradient of the site, for the following reasons:
  - a. To yield accurate soil profiles; and
  - b. To establish accurate background water quality.

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2. All lysimeters and/or wells are to be installed in accordance with Chapter 18.104 RCW and Chapter 173-160 WAC, or as excepted by WDOE. The specific means of installing the monitoring devices should be included. Current location of lysimeters does not appear to be justified. Please submit a rationale for these locations.
3. The plan should additionally include:
  - a. A quality assurance/quality control program; and
  - b. Sample equipment cleaning procedures.
4. In that we are using 40 CFR, Part 265, Subpart F, merely as guidance, we have the latitude of altering the parameters to be analysed. Therefore, it is recommended that the following be eliminated from the plan:

fluoride  
coliform bacteria  
manganese  
sodium  
sulfate

and add:

copper  
pentachlorophenol  
napthalene

5. Will individual sampling lines be dedicated to each lysimeter?
6. To my knowledge, the State does not certify laboratories for ground-water quality analyses; however, it is expected that the chosen lab will have significant experience in analyzing the parameters in this proposal.

Should you have any questions on the comments offered, please contact Frank Monahan or me at (206) 753-2353.

Sincerely,

*Frank Monahan for E.B.*

Eric B. Egbers  
Environmental Quality Inspector

EBE:si

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